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ABSTRACT

Empathy has been defined, operationalized, and assessed in many different ways. A study was conducted to determine whether selected empathy measures actually measured a similar construct when they were applied in interpersonal communication settings. The five measures chosen for analysis were those typically used by researchers to assess predictive empathy, perceived empathy, and self-report empathy. A correlational analysis was applied to data collected from 90 college students enrolled in a basic interpersonal communication course. The results indicated that none of the five measures was strongly or moderately correlated with any of the other measures. (FL)

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AN ANALYSIS OF THE CONCURRENT VALIDITY OF THREE TYPES OF EMPATHY MEASURES

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Since the late 1940's, empathy has been studied by social science researchers (Dymond, 1948; Gage, 1952; Cronbach, 1955; Carkhuff, 1969; Kurtz & Grummon, 1972; and Northouse, 1977) in an attempt to explain the way in which empathy functions in the communication process. It is well established that empathy plays an important role in effective interpersonal communication. In the therapeutic setting, empathy has been described as a core condition of successful therapy (Truax & Carkhuff, 1967). Teachers of human communication stress the empathizing function in human interaction to the point of suggesting it is synonomous with communication (Miller & Steinberg, 1975; Cronkhite, 1976).

The derivation of the term "empathy" is accredited to Theodor Lipps (1909) who defines einfuhlung, or empathy, as the process of feeling into. Additionally, in the research literature, empathy is defined in primarily four different ways. In the interpersonal perception literature, empathy is defined as the ability of an individual to accurately predict the attitudes, values, and emotions of another. The emphasis in this approach is on perception accuracy. In the therapeutic literature, the definition of empathy is extended to include the responses individual's make to the perception of others. Empathy is defined from this viewpoint as the ability of an individual to be sensitive to the thoughts and feelings of another individual and to supportively communicate this understanding to the other. Another perspective to the study of empathy has focused on the receiver, the person with whom the listener is empathizing. In this approach, the level of understanding reported by the client is defined as perceived empathy. In the personality literature, empathy is defined as a trait characteristic of individuals who report themselves as sensitive to the feelings of others.

Although empathy is central to various theories of human interaction, there appears to be some ambiguity and confusion regarding the meaning and assessment of empathy (Katz, 1963; McCroskey, Larson, & Knapp, 1971; Lahiff, 1975; Wallston & Weitz, 1975; Dance & Larson, 1976). Empathy has been defined in many different ways, operationalized in various ways, and assessed differently. In an effort to clarify empathy as a construct the present study selected five empathy instruments representative of three different methodological approaches for analysis.

The purpose of the study was to determine whether selected empathy instruments actually measure a similar construct when employed to measure the empathic process in on-going interpersonal communication dyads. The kinds of instruments selected for analysis were those typically used by investigators to assess predictive empathy, perceived empathy, and self-report empathy. Although equally important, Rogerian therapeutic empathy was not the focus of this investigation.

REVIEW OF LITERATURE

Predictive Empathy

In the social science literature predictive empathy is labeled person perception, intuition, sensitivity, communication accuracy, perceptual accuracy, and predictive accuracy to name a few. Degree of accuracy in person perception is the common element in each of these approaches. Studies of predictive empathy have focused primarily on the perceptual component of the empathic process. More specifically, these studies have concentrated on that dimension of the empathic process whereby an individual attempts to accurately perceive the thoughts and feelings of another individual within a particular communication situation.

Research on predictive empathy began with the work of Rosalind F. Dymond (1948, 1949). Her investigations, which are frequently cited in the literature, attempted to delineate projection and empathy, the former being antithetical to the latter since projection involves attributing to others one's own meanings and empathy involves ascertaining for one's self the meaning of others. Dymond operationalized empathic ability as the accuracy of a subject's predictions of another subject's ratings on a series of self-report scales in a given situational context.

Similarly, most predictive empathy measures since Dymond's instruct subjects to predict a target person's responses to a series of agree-disagree type statements. If subjects perceived target persons about whom they were filling-out the questionnaire as like themselves, the derived empathy score was the result of both accuracy of perception and projection. Delimiting that portion of subjects correct predictions which was based on the attribution to others of subjects own attitudes has been a difficult problem for researchers (Gage & Cronbach, 1955).

In fact, this problem remained an obstacle to development of empathy measures which were relatively free of biases until the mid-sixties when Hobart and Fahlberg (1965) developed a refined procedure which accounts for the confounding effects of projection on overall empathy scores. Hobart and Fahlberg's procedure measures empathy by having subjects predict an object person's responses on those items on a series of agree-disagree statements which the subject has self-scored differently from the target person. Predictive empathy represents the ability of an individual to see the uniqueness and differences in others.

Hobart and Fahlberg have designed an empathy measure which accounts for projection but does not eliminate it entirely. To date this measure is the most advanced predictive empathy measure.

Perceived Empathy

An entirely different approach to the measurement of empathy is found in the studies of researchers who have measured empathy as perceived understanding. Perceived empathy represents the understanding which is experienced by an individual with whom a listener is empathizing. It is a process which occurs in the client and is measured by having a client rate a listener on a series of statements.

Representative of this approach is the research of Barrett-Lennard (1962). Basing his theory on the seminal works of Rogers (1957) and Katz (1963), Barrett-Lennard has constructed a model of empathy composed of three distinct phases. The initial phase is labelled the "inner process of empathic listening" and is similar to predictive empathy. The second is called "communicated" empathy and parallels the central dimension in Rogers' approach to client-centered therapy. The final phase of the empathic process is labelled "perceived empathy."

Barrett-Lennard has developed inventories which assess empathy as it occurs at the different phases in the process. To measure perceived empathy, Barrett-Lennard designed a 16 item Likert-type scale which asks the respondent to describe the level of understanding he or she may feel from a specific listener. This inventory has been used in various studies of perceived empathy and is typical of perceived empathy measures.

Self-report Empathy

A third major way empathy has been measured is the use of self-reports. Empathy, in this view, is the degree to which a subject indicates

that he or she understands others. Personality inventories have been used to measure self-report empathy as well as inventories which ask respondents to report directly their own perception of their own level of understanding of others.

Typical of the personality self-report measures is the Hogan empathy measure. It is composed of items drawn from the California Psychological Inventory (CPI, Gough, 1964), and the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1943) and discriminates high and low empathizers. It is assumed, in the Hogan approach, that empathy is a part of a person's personality and that it can be measured as other common personality traits are measured.

Similar to the Hogan personality type self-report measure are self-report measures of emotional sensitivity (Aderman & Berkowitz, 1970; Mehrabian & Epstein, 1972). In this research, it is theorized that empathy can be measured by subjects' responses to a series of statements about the emotional experiences of others. In this approach, an individual who reports that he or she is sensitive to others' emotional situations is said to be empathic. Empathy is essentially self-reported emotional responsiveness.

The most direct method of measuring self-report empathy is to ask individuals directly the degree to which they feel empathic. Obviously, a social desirability factor is inherent in this approach. Most individuals would find it desirable to be empathic and therefore may tend to rate themselves as more empathic than they actually are. Barrett-Lennard (1962), Rogers et al. (1967), and Kurtz and Grummon (1972) all report that therapists tend to overrate their own empathic ability.

Nonetheless, this approach has been used in studying empathy and is typified by a measure developed by Barrett-Lennard. On this measure, subjects rate their own empathic ability on a 16-item inventory composed of questions which ask subjects about the degree to which they understand others. Empathy from this perspective is the degree to which an individual reports an understanding of others.

Overall, in the research literature empathy has been assessed in many ways including self-report empathy, perceived empathy, and predictive empathy. Each of these major approaches has resulted in different operational definitions of empathy as a construct. However, each approach has labelled the construct under observation empathy and each has purported to measure empathy.

The present study sought to determine the concurrent validity of five empathy measures selected from the three different approaches. It sought to ascertain the nature of the relationships between predictive, perceived, and self-report empathy measures. The goal of the study was to determine whether the five selected empathy measures were correlated with each other and whether certain of the measures were correlated with more than one other empathy measure.

METHOD

Measures

The five empathy instruments selected for analysis can be classified under three approaches: predictive, perceived, and self-report empathy.

Predictive empathy. The procedure used to measure predictive empathy was developed by Hobart and Fahlberg (1965) to overcome problems that earlier researchers had encountered. To reduce stereotype effects and

response biases the Hobart and Fahlberg measure consisted of 46 forced-choice agree-disagree statements. The source of these statements was the Myers-Briggs Type Indicator which characterizes people into Jungian psychological types. To control for projection, the instrument is scored by summing the number of times a subject accurately predicts a target subject's responses on statements which the target subject has scored differently than the subject. The predictive empathy score is a ratio score which is derived by dividing the number of correct predictions by the total number of dissimilar responses made by paired subjects.

Operational, predictive empathy was defined as the number of correct predictions a subject makes of a target person's responses on 46 agree-disagree statements divided by the number of statements on which the subject and the target person have dissimilar responses.

Hobart and Fahlberg validated the empathy ratio score with two external measures of predictive empathy: Dymond's deviation score and Hastorf and Bender's refined empathy score (1958). The correlations between the empathy ratio score and the two external measures were .46 and .74, respectively.

Perceived empathy. To measure perceived empathy, the Barrett-Lennard Relationship Inventory which is designed to measure empathic understanding, congruence, level of regard, and unconditionality of regard was employed. The perceived empathy scale on the Relationship Inventory is composed of 16 items on which a subject is asked to describe a dyadic partner's level of empathic understanding on a 6-point scale which has a range of +3 to -3, with no neutral point. Subjects rated their partners on statements such as "She usually senses or realizes what I am feeling," and "He appreciates exactly how the things I experience feel to me."

Operationally, perceived empathy was defined as the numerical summation of the responses a subject makes on a 16-item instrument constructed of statements describing the dyadic partner's responses to the subject.

Test-retest reliability coefficients from .86 to .91 for the empathic understanding scales on the Relationship Inventory have been reported by Barrett-Lennard (1969) and Mills and Zytowski (1967) using college students as subjects. Snelbecker (1967) and Hollenbach (1965) report split-half reliability coefficients ranging from .61 to .94 for the four principal Relationship Inventory scales.

Self-report empathy. Three distinct types of instruments were used to assess self-report empathy: Hogan's (1969) empathy scale, Mehrabian and Epstein's (1972) emotional empathy scale, and Barrett-Lennard's (1962) self-report empathy scale. The Hogan empathy scale is based on the assumption that an empathic person has a disposition which allows the person to adopt a broad moral perspective. It is a 64-item personality instrument constructed of true-false statements selected from the MMPI, the CPI, and tests developed by the Institute of Personality Assessment and Research, University of California, Berkley, 1969. Greif and Hogan (1973) report test-retest reliability coefficient of .84 for this scale and internal consistency estimates up to .71.

Using the Hogan empathy perspective, empathy is operationalized as the summation of a subject's correct responses to a 64-item true or false instrument constructed of statements taken from the CPI, MMPI, and the IPAR.

Mehrabian and Epstein's emotional empathy scale measures the degree to which an individual vicariously responds to the perceived emotional

experiences of others. It is a measure of emotional expressiveness. The instrument is composed of 33 statements to which a subject responds on a 9-point scale on which +4 represents "very strong agreement" and -4 represents "very strong disagreement." The total emotional empathy score is computed by obtaining the algebraic sum of all 33 responses to the scales. Mehrabian and Epstein report a split-half reliability correlation of .84 for the entire measure.

Operationally, self-report empathy from Mehrabian and Epstein's perspective is the algebraic sum of a subject's responses to a 33-item instrument composed of items about emotional expressiveness.

Self-report empathy was also measured by employing the empathy scale on the Barrett-Lennard Relationship Inventory. This scale is similar to the instrument used to measure perceived empathy in that it is constructed of 16 items on which the subjects is asked to describe his or her own level of empathic understanding on a 6-point scale with a range from +3 to -3. The difference between this instrument and the perceived empathy instrument is in the format of the statements on the scales. On the self-report form the subjects rate themselves and on the perceived empathy form subjects are rated by the individuals with whom subjects are empathizing.

Operationally, self-report empathy was the numerical summation of the responses a subject makes on a 16-item instrument constructed of statements describing the level of understanding a subject feels toward a dyadic partner.

Mills and Zytowski (1967) have reported test-retest reliability data using a sample of undergraduates (N = 79) which indicated an r = .90 for the self-report empathy scale. Barrett-Lennard (1969) reported an r = .86 for test-retest reliability on this scale.

Procedure

To collect data, it was necessary to have paired subjects. Instructions on specific questionnaires asked subjects to rate a target other with whom they had engaged in communication. As a part of the interpersonal communication course, 90 students were randomly paired with each other for a series of 10 dyadic interactions, the overall purpose of which was the improvement of listening and interpersonal skills. These pairs became the subjects for the study.

Near the end of the semester, students were administered the questionnaire packet which contained the five empathy measures, each of which had specific instructions. Instructions on the predictive empathy inventory asked subjects to respond first in terms of their own attitudes and secondly in terms of the way they felt their dyadic partner would respond to the inventory. Instructions on the perceived empathy inventory asked individuals to respond to the way they felt their dyadic partner had responded to them in the dyadic interactions. On the self-report inventories, subjects were instructed to respond in terms of their own attitudes or the way in which they perceived their own level of empathic understanding.

RESULTS

Scores subjects received on each of the five empathy measures were analyzed using the Pearson product moment correlation. Intercorrelations between predictive, perceived, and self-report empathy are presented in Table 1.

All of the intercorrelations between the empathy measures were either negligible or very low. Only the correlation between Mehrabian's self-

report measure and Barrett-Lennard's self-report measure was significant ($r = -.284$). However, this correlation was obviously weak and in a negative direction.

Table 1

CORRELATIONS BETWEEN EMPATHY MEASURES

Measure	1	2	3	4	5
Predictive Empathy	1.0				
Perceived Empathy	-.097	1.0			
Self-report Empathy (Hogan)	-.131	.196	1.0		
Self-report Empathy (Mehrabian)	.067	-.162	-.174	1.0	
Self-report Empathy (Barrett-Lennard)	-.170	.130	.112	-.284*	1.0

*p .05

An analysis was done to determine the power of the significance tests associated with the correlations. The range of power estimates was .10 to .775 (Glass & Stanley, 1970).

DISCUSSION

The intention of this study was to determine the concurrent validity of five selected empathy measures. Chosen for analysis were measures which have been used consistently by prior researchers in studies of the empathic process. The measures were representative of three different theoretical approaches. If the measures had concurrent validity, it was expected that subjects' scores on the five instruments would be correlated.

The central finding of the study was that none of the five empathy measures were strongly or moderately correlated with any of the other empathy measures. Negligible correlations between measures of predictive,

perceived, and self-report empathy in on-going dyadic relationships suggest that each empathy instrument measures a different construct. Although all five empathy instruments have been employed by researchers to measure a single construct, each appears to be measuring something different. This finding indicates that there exists no concurrent validity between the five empathy measures selected for analysis.

Several observations can be made concerning the results of this study. First, predictive empathy appears unreleated to perceived empathy in on-going dyads. Being accurate about another individual's attitudes and feelings is not a necessary prerequisite to having the other individual feel as if he or she is understood. Subjects in this study who had high predictive empathy scores were not necessarily perceived as more understanding by their dyadic partners.

This suggests that accuracy of perception (predictive empathy) is a distinct construct and not a necessary condition of perceived empathy. Individuals may perceive others as empathic but the understanding they perceive is not necessarily a function of whether others actually perceive them accurately.

Second, predictive empathy is also unrelated to self-reported empathy. Whether one is or is not accurate in perceiving others correctly is unrelated to whether one describes himself or herself as empathic. Individuals in this sample who scored high in predictive empathy did not necessarily score high on emotional sensitivity (Mehrabian's self-report instrument), on a personality type measure (Hogan's self-report instrument), or on self-perceived empathy (Barrett-Lennard self-report instrument). In essence, the self-reported scores subjects made of their own empathy were

distinct from subjects predictive empathy scores, suggesting that self-report empathy and predictive empathy are separate constructs.

Third, self-report empathy and perceived empathy are different from each other. Subjects who were high empathizers as indicated by the three self-report empathy measures were not necessarily perceived by their dyadic partners as understanding listeners. Likewise, low empathizers were not always perceived as lacking in understanding. The facet of the empathic process which is measured by self-report empathy measures is not the same facet of empathy as that measured by having individuals report the level at which they feel understood. Again, the two kinds of instruments are measuring different variables. Both variables are labeled empathy, but self-report empathy and perceived empathy are distinct constructs.

Fourth, analysis of the intercorrelations of the three self-report empathy instruments indicates that each of the self-report empathy instruments measures something different. In the study, three kinds of self-report empathy instruments (emotional sensitivity, personality type, and self-perceived) were employed. There was little or no relationship between the way a subject scored one instrument and the way he or she scored another. Individuals high in emotional sensitivity were not always the individuals who scored high on the personality-type measure of empathy, nor were they the individuals who consistently reported their self-perception as highly empathic. Concurrently, when employed to measure empathy in on-going dyads, the self-report instruments do not measure a unitary construct.

Findings of this study give additional support to prior research which has indicated that empathy is an ambiguous construct. Each of the

instruments selected for analysis in this study has been used in prior studies to measure empathy. However, none of the five empathy measures employed in the present study were even moderately related.

These results suggest that possibly the empathic process involves several steps and measuring empathy involves operationalizing it differently at each step. For example, it seems logical to assume that predictive empathy accounts for part of the empathic process but not the entire process. It is not the same as perceived empathy. Perhaps the empathic process involves a sensitive personality and perceptual accuracy in the listener and an openness to being understood in the client. In addition, the process also involves communicated empathy by the listener which is an emphasis in therapeutic interaction. Each of these steps appear to be logically parts of the greater empathic process.

For researchers, the present study further validates the need to operationalize empathy carefully. In choosing a measure of empathy, the investigator needs to ascertain specifically that part of the process which is to be analyzed. Generalizability of results will continue to be limited until researchers are more selective in choosing empathic measures.

Also, the results point to the need for additional empathy measures which would have concurrent validity with one or more of the present measures. Perhaps a new empathy measure could be designed which could be validly used to analyze more than a single aspect of the empathic process.

Empathy remains an important construct in theory developed to explain the human communication process. Yet the empathy measures used by social science researchers to explain how empathy functions in relationships have resulted in a body of research which lacks explanatory power because of

the absence of concurrent validity between empathy measures. Until a unified theory explaining the complex aspects of the empathic process is constructed and recognition is given to the diversity of empathy measures, the importance of the empirical findings concerning empathy will remain unclear.

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